In the Specification:

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Replace the paragraph beginning on page 1, line 34 with the following amended paragraph:

Patent publications US 4,818,348; 4,830,343 5,830,343; 5,393,399; 5,654,497; and EP 692711 disclose some liquid analysers that use polarographic sensors. In the first publication referred to, the liquid is vaporized and the vapour is led through parallel sensors. Finnish patent application 892351 also discloses a disposal electrochemical sensor, which is intended for medical use. The generally known sensors have a narrow area of application and they are usually only able to measure a few predefined substances and their contents in a liquid. A sensor according to publication US 5,830,343 will not remain in operating condition for long, because even individual fibres can cause a short-circuit between the electrodes of the tiny sensor.

Replace the paragraph beginning on page 5, line 12 with the following amended paragraph:

According to Figure 2, the electrochemical measurement liquid-flow circuit includes a valve 12 13, a sensor unit 16, flow meters 17, a pH measurement sensor 15, and temperature measurement 18.

Replace the paragraph beginning on page 8, line 25 with the following amended paragraph:

The materials of the pairs of electrodes are selected according to the desired application. What is essential is that each pair of electrodes is separate and measures the properties of the sample in its own voltage range. The electrode materials can be, e.g.

U.S. Application No. 10/089,985 -- 6

platinum, gold, silver, iron Fe₃ Fe³⁺, iron Fe₂ Fe²⁺, stainless steel, molybdenum, zink zinc, titanium, cadmium, copper, glass, electrically-conductive plastic, ceramics.